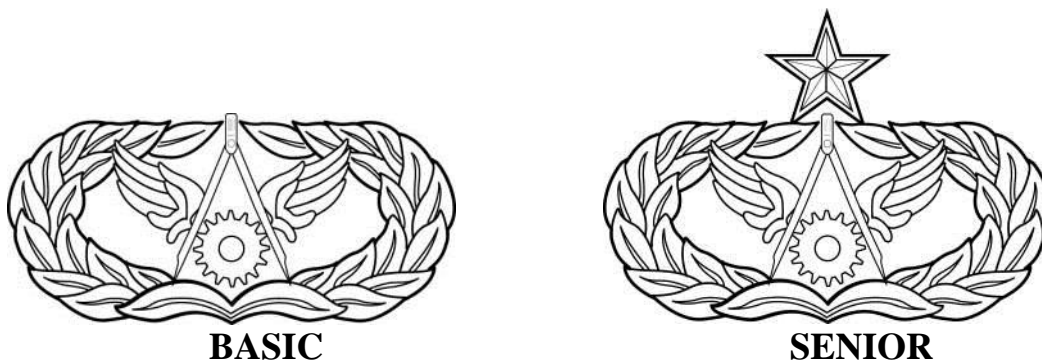


AFSC 32EX Civil Engineer Officer



CAREER FIELD EDUCATION AND TRAINING PLAN

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**CAREER FIELD EDUCATION AND TRAINING PLAN (CFETP)
CIVIL ENGINEER OFFICER
AFSC 32EX**

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DEPARTMENT OF THE AIR FORCE
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CFETP 32EX
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1 May 2015

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Part I:

Preface

1. Air Force (AF) Civil Engineers are Airmen first and engineers always. In this manner, the Civil Engineer (CE) officer is required to meet and support the AF, Joint, and Coalition war-fighters' needs during peace and war. To help CE officers be successful in their careers, this Career Field Education and Training Plan (CFETP) identifies and provides a description of desired training, education, professional development, and experience.

For additional information on officer professional development, access the AF Officer Classification Directory (AFOCD) on the AFPC web site at <https://mypers.af.mil>. The AFOCD takes precedence when information differs from this CFETP.

2. Suggestions to improve this CFETP are welcome and encouraged. Please send recommended changes to the CE Officer Career Field Manager (CFM) at HQ USAF/A4CS (Sustainment Division Chief) Workflow (HQ USAF/A4CS Workflow). HQ USAF/A4CS will review the CFETP annually and make updates and changes when needed.

3. Overview of the CFETP:

Part I: Section A explains what the CFETP is and how it should be used. **Section B** contains the specialty description and career development information relevant to the CE career field.

Part II: Section A shows typical flight tasks performed at base level and higher for those flights in which most CE officers will work throughout their careers. **Section B** shows numerous training and education courses available for development within the CE career field. **Section C** discusses other training opportunities, such as continuing education, professional military education (PME), and other officer professional development (OPD) opportunities. **Section D** describes the role of leadership and supervision. This section includes information on supervising CE officers, enlisted members and civilians, the feedback process, as well as awards and decorations.

Terms and Abbreviations

Air Force Institute of Technology (AFIT). Located at Wright-Patterson AFB, OH, AFIT manages the AF's resident and Civilian Institution (CI) graduate programs and is the institute for the CE career field professional continuing education (PCE).

Air University (AU). Located at Maxwell AFB, AL, AU is the AF's resident home for PME as well as Officer Training School (OTS) and Air Force Reserve Officer Training Corps (AFROTC) Field Training. In-resident PME programs include: Squadron Officer School (SOS), Air Command and Staff College (ACSC), and Air War College (AWC).

Career Field Education and Training Plan (CFETP). A comprehensive, multipurpose document that covers education and training requirements for a specific career field. It provides a logical career field progression plan, including education and training, and assists in defending education and training budgets.

Defense Acquisition University (DAU). Located at Ft Belvoir, VA, DAU is the Department of Defense's (DoD)'s institutional authority in implementing Defense Acquisition Workforce Improvement Act (DAWIA) and conferring certification levels. DAU offers a variety of acquisition courses in resident and via Distance Learning.

Distance Education. Distance education is on the cutting edge of teaching media and takes advantage of delivery methods such as satellite, internet, and computer-based instruction to deliver course information. Many AFIT courses are offered through distance education.

Education and Training Review Panel (ETRP). The ETRPs are panels responsible for reviewing all CE education and training programs (including graduate education) for relevancy and ability to meet the needs of the career field. The ETRPs consists of four separate panels: Engineering, Environment, Academic Degree, and Training.

Education and Training Program Board (ETPB). The ETPB is the CE corporate body, chaired by HQ USAF/A4C, responsible for reviewing all recommendations of the ETRPs and approving the best course of action for meeting all education and training needs of the career field. The ETPB meets annually, following conclusion of the ETRPs, to approve the next fiscal year's program.

Major Command (MAJCOM) Functional Manager (MFM). Typically, this function is accomplished by the senior 32E on the MAJCOM staff and should have regular interaction with the CE commanders within the MAJCOM, and an awareness of all core 32E officers within the MAJCOM. This function, as well as 32E Development Team membership, is evolving based on the the standup of the AF Installation and Mission Support Center (AFIMSC.)

The Civil Engineer School (TCES). Located at Wright-Patterson AFB, OH, TCES provides CE officer initial skills training and PCE to the CE career field.

Section A - General Information.

1. Career Field Education and Training Plan (CFETP)

1.1. Purpose of the CFETP. This CFETP provides guidance to the 32EX officer through a recommended path of experience. This plan outlines mandatory and recommended education, training, and experience to chart and execute a CE officer's career. The CFETP is a ***dynamic tool and therefore cannot include every currently available course relevant to the CE career field.***

Each duty location will provide unique opportunities for career development, and those opportunities should be fully exploited. It is highly encouraged for Air Reserve Components (ARC) CE officers to follow this CFETP to the maximum extent possible. However, obstacles such as career progression, assignment changes, and Permanent Change of Station (PCS) / assignment may be different for ARC members hindering strict adherence to this CFETP.

1.2. Use of the CFETP. This plan is to be used by CE officers, supervisors, commanders, and mentors. It may also be used by MFMs, typically the senior 32E representing the MAJCOM, to ensure comprehensive and cohesive training programs are available for each individual with the 32EX Air Force Specialty Code (AFSC).

1.2.1. Completion of education, training and experience is a joint endeavor between the officer, his or her supervisor, and the unit commander/staff director. Every officer should take the initiative to determine realistic milestones for achieving his/her goals. Each officer should use this plan to work with supervisors, commanders, and mentors to determine appropriate levels and timing of education, training, and professional development to ensure they have every opportunity to attend identified courses, attain leadership opportunities, pursue professional certification, and complete professional development.

1.2.2. MFMs ensure their training programs complement the AF-level training listed in this CFETP. Identified requirements may be satisfied through a number of avenues, including job experience, resident training, contract training, exportable courses, and distance learning. MAJCOMs and units may supplement this plan with additional training and professional development requirements as desired.

1.3. Coordination and Approval of the CFETP. HQ USAF/A4CS is the coordinating agency for this document. Approval authority is the Director of Air Force Civil Engineers, HQ USAF/A4C. HQ USAF/A4CS will review this document annually to ensure currency.

1.4. Career Field Manager (CFM). The Functional Manager for the 32E career field is the HQ USAF/A4C. The CFM is the Sustainment Division Chief, Headquarters Air Force, HQ USAF/A4CS. Contact the CFM AO at HQ USAF/A4CS Workflow (usaf.pentagon.af-a4-7.mbx.a7co-workflow).

Section B - Career Field Progression and Information.

2. Civil Engineer Career Field Specific Information

2.1 Specialty Description. The AFOCD describes the 32EX CE officer Air Force Specialty (AFS). It is the guiding document for all AF officer classification issues and takes precedence over this CFETP for classification issues. HQ AFPC/DPSIDC is the Office of Primary Responsibility for the AFOCD as well as all classification issues. The following excerpts from the AFOCD reflect the most current information for the CE career field:

Doctrinal Capability. The CE Career Area provides general engineering support for deployed AF and joint units and weapons systems, emergency repair of war damage to air bases, base denial activities, and other related combat support functions; develops, monitors, and briefs survivability actions and methods to recover capabilities after attack; and organizes, trains, and equips contingency forces for nuclear, biological, chemical, and conventional attack operations and other emergency situations. The career field also encompasses activities relating to acquisition, maintenance, asset management, operation, and disposal of real property facilities, and includes planning, program formulation and execution, policy development, inspection, command, and direction of CE activities. Included are supervisory, operational, and engineering responsibilities for construction, maintenance, and repair of AF real property; operation of utility systems; fire prevention, protection, and aircraft crash rescue; disaster preparedness; and explosive ordnance disposal (EOD). Functions involving planning and programming for maintenance, repair, and construction requirements; design and preparing plans and specifications for contracts, contract inspection, budgetary development and planning; establishing standards, requirements, and funds management for personnel, supplies, and equipment; environmental protection and base procedures for construction and maintenance of environmental improvements; planning, budgeting, construction, maintenance, and management of military family housing; acquisition, utilization, and disposal of real estate under AF jurisdiction; and training and use of CE professional and technical personnel.

Specialty Summary. Develops and implements CE force employment, and provides staff supervision and technical advice. Performs and manages CE functions and activities to provide facilities and infrastructure supporting the United States and allies. Activities include programming, budgeting, project management, drafting, surveying, planning, feasibility studies, construction management, utilities operations, energy and environmental programs, land management, real property management and accounting, fire emergency services (FES), EOD, readiness and emergency management (R&EM) programs, family housing and dorm management, and mobilization programs (i.e., Prime Base Engineer Emergency Force (BEEF)) at base level. May serve in Rapid Engineer Deployable Heavy Operational Repair Squadron Engineer (RED HORSE). RED HORSE squadrons to perform heavy construction requirements as required. Serves on response teams and related installation support services. Advises commanders and government officials on effective use of CE resources. Related DoD Occupational Group: 240100.

Duties and Responsibilities. Supports combat operations and activities. Maintains trained and equipped forces capable of responding to worldwide contingencies and the full range of military operations. Evaluates capabilities and develops contingency methodologies to accomplish mission objectives. Maintains emergency response force to cope with enemy attacks, major accidents, and natural disasters. Plans, develops, and executes procedures to mitigate the effects, render safe, and dispose of conventional, nuclear, chemical, and biological ordnance and improvised explosive devices (IEDs). Provides Emergency Operations Center (EOC) expertise regarding control and integration of emergency response force. Develops, monitors, and briefs survivability actions and methods to recover capabilities after attack. Organizes, trains, and equips contingency forces for conventional and nuclear, biological, and chemical attack operations, and other emergency situations. Acts as Weapons Recovery Center director as a member of the Response Task Force (RTF) for nuclear accidents.

Determines requirements, establishes plans, provides designs, and directs operations, maintenance, repair, alteration, addition, and construction of facilities and utility systems. Determines personnel and material resource requirements. Plans and establishes land use, and provides environmental stewardship. Directs CE forces in support of mission requirements, and coordinates activities with subordinate and lateral units and functions. Determines proper use of facilities and effective employment of utility systems. Acts as technical representative and engineering consultant for operations and maintenance activities. Coordinates activities with local, state, federal, and host country agencies.

Develops CE plans and policies. Evaluates impact of legislative action, executive orders, directives, and management decisions. Consults with manpower, organization, and personnel staffs to ensure appropriate use of CE personnel. Coordinates with staff agencies on fiscal and legal matters. Directs training, business practices, and professional development activities. Serves as CE advisor to commanders. Implements standardization and evaluation, and monitors compliance of programs and policies. Directs and conducts engineering research and feasibility studies and surveys.

2.2. Skill and Career Progression. Career progression is a function of experience, knowledge and time, and includes duty assignments, developmental assignments and professional development. Figure 1, the CE Career Development Pyramid, integrates the components into one sight picture. Additional discussion and details are described in Part II of this document. The AF is fielding a new interactive Career Planning Tool, which will be ready for use by October 2015 and can be found at <https://afvec.langley.af.mil/af-cpt/Home/Dashboard.aspx>. This will allow an officer to see what the next steps in his/her career will be and will allow the officer to share that with mentors of his/her choosing.

2.2.1. CE Career Progression. CE officers are an important component of the Agile Combat Support core function. There are no definitive, concrete steps that need to be attained to reach rank or position; however, certain jobs, experiences, education, training, and PME will help an officer achieve his/her goals. Still, it's important to remember: *the most important job to your professional development is the one you hold today.* A

“traditional” CE career typically includes a strong technical base, staff assignments, deployments, and command of a squadron or higher. Beyond that, senior leaders of our career field will emerge based on the experience and knowledge gained throughout their career. The idea behind a successful career is to begin by building primary job proficiency through a strong technical foundation. After building depth CE officers should focus on building more breadth by taking on leadership within the squadron and eventually moving beyond tactical to more strategic levels. A successful career will be focused on performance, not position. Performing well in any and all positions offered is more important than seeking the ideal position for promotion.

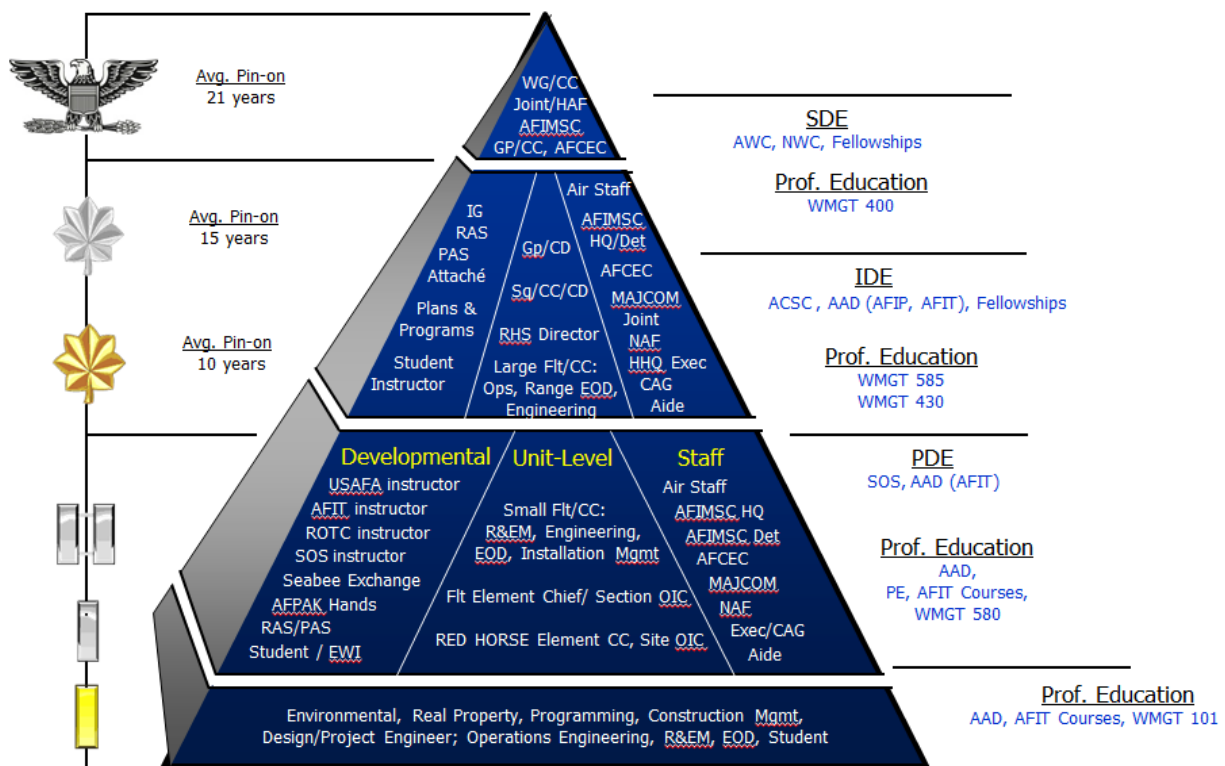


Figure 1: CE Career Development Pyramid

2.2.2. CE Career Path. History has shown that a primary key to success is defining clear personal and professional goals, both short term and long term. Future CE senior leaders will be those who achieve depth and breadth through job experience, education and training, and professional development. A solid foundation in these areas will pay high dividends in the future. Failure to build the foundation at the appropriate time may, in effect, close certain doors for advancement. The AF first and foremost needs leaders, and any successful officer’s career focuses on leadership experience and expertise. Not every Civil Engineer’s path is the same, but most should put themselves on a course to eventually compete for squadron command. Some CE officers may eventually strive to be a Joint Engineer, lead installation support officer for a MAJCOM, Group Commander, or even Wing Commander.

2.2.3. CE Officer Assignment Options. When initially assigned to the civil engineer career field, a junior CE officer is expected to build depth through technical experiences with increasing complexity, span of control, and responsibility. The following is a summary of typical assignment options; CE officers can find further details on 32E authorizations and locations in the Assignment Management System (AMS) module on AF Personnel Center (AFPC) Secure Applications site <https://w20.afpc.randolph.af.mil/AFPCSECURENET20/PKI/MainMenu1.aspx>.

2.2.3.1. Base CE Squadron Flights. Most new CE officers will be assigned to a base CE squadron, which offers an array of opportunities for a CE officer to challenge and grow technical expertise and leadership skills. These squadron-level experiences include detailed tactical-level planning, execution, and management of base infrastructure and emergency services programs. In addition to most base CE squadrons also have the Prime BEEF mission, which postures its military Airmen to quickly deploy that same base operations, maintenance, and survivability expertise to locations anywhere in the world. With exceptions for those functions that have been outsourced, AF CE Squadrons (both AD and ARC) are typically organized into six flights, but can range from four to ten flights depending on location, mission, and organization structure. When assigned to a base-level CE squadron, officers may expect to perform in any of the CE flights described below if assigned to a base level squadron except for Fire Emergency Services.

2.2.3.1.1. The *Engineering (CEN)* flight provides comprehensive planning, programming, Comprehensive Asset Management Plan (CAMP) integration, and execution of base level facility/infrastructure requirements that exceed the operations flight in-house capabilities. The Portfolio Optimization element creates a single source for requirements integration and Base Comprehensive Asset Management Plan (BCAMP) development. The Project Management element executes contracts including architecture and engineering (A&E) service contracts, indefinite delivery/indefinite quantity (IDIQ) contracts, simplified acquisition of base engineer requirements (SABER) contracts, multiple award construction contracts (MACC), and blanket purchase agreements (BPAs). The flight is a lean cradle-to-grave project development and execution organization. Lieutenants or junior captains will normally work in this flight as project programmers, program managers, or as Officer in Charge (OIC) of the Project Execution Section and may have supervisory responsibilities. Some opportunities may exist for captains or majors as Flight Commander, Deputy, Project Management element (CENM) chief or the Portfolio Optimization element (CENP) chief, depending on local circumstances. CE officers in this flight perform base comprehensive planning, project programming, environmental planning, technical design, and construction surveillance for projects to maintain, restore, and upgrade base facilities and infrastructure systems.

2.2.3.1.2. The ***Installation Management (CEI)*** flight is responsible for the Financial Management (FM) and resource advocacy functions, operating housing referral, unaccompanied housing, military family housing, dormitory and furnishings management, overseeing privatized housing and optimization of the installation's built and natural assets. The Asset Accountability element (CEIA) incorporates real property, resources, force management and the IT administrator. The Housing Management element (CEIH) ensures access to affordable, quality housing facilities and services. In concert with AFCEC installation support teams, the Environmental element (CEIE) retains the focus on environmental compliance, the Environmental Impact Assessment Plan (EIAP), and optimization of natural assets. CE officers can normally expect to work in this flight as a lieutenant or junior captain as a program manager with potential supervisory responsibilities.

2.2.3.1.3. The ***Readiness and Emergency Management (CEX)*** flight is the focal point for all contingency support and prepares the wing for operations during natural disasters, major accidents, war, and other base emergencies. CE officers in this flight provide planning, program management, and training for integrated wing readiness plans, wing EM plans, CE readiness, and the AF Incident Management System (AFIMS). R&EM flight is normally led by a CE company grade officer (CGO) who can expect direct supervisory responsibility to include evaluations, development, and disciplinary actions. In the capacity of R&EM flight commander, the CE officer has the oversight of the Prime BEEF program and deployment manager functions as well as the EM functions. Key Prime BEEF duties include: facilitating a training program to sustain unit readiness per AFI 10-210, *Prime Base Engineer Emergency Force (BEEF) Program*. The R&EM flight commander briefs the Base Civil Engineer (BCE) monthly of status of unit's readiness as reported in Status of Resource and Training System (SORTS), Defense Readiness Reporting System and the Air and Space Expeditionary Force (AEF) unit type code (UTC) Reporting Tool (ART). Key EM responsibilities include facilitating EM Working Group (EMWG); participating in several other cross-functional working groups & boards; overseeing Chemical, Biological, Radiological and Nuclear (CBRN) defense training; interfacing with local authority EM structures and ensuring operability of the Emergency Operations Center (EOC) and Unit Control Center (UCC) in support of contingency operations. When fully trained the R&EM flight commander is qualified as an EOC manager.

2.2.3.1.4. The ***Operations (CEO)*** flight operates, maintains, and repairs installation facilities and infrastructure. The operations flight provides the squadron's core capability to maintain and recover bases for the projection of air and space power. The Heavy Repair element (CEOH) includes the structures and pavement shops. The Facilities Systems element (CEOF) includes the fire alarms, electric, and power production shops. The Infrastructure Systems element (CEOI) includes the environmental control

systems, water and fuels systems maintenance, entomology, and the heating, ventilation, and air conditioning (HVAC) shops. The Operations Engineering element (CEOE) includes the Requirements and Optimization section, oversees service contracts, and operates material control and customer service functions. Typically, an O4 (Major) is the authorized grade for the Operations Flight Commander, but can be filled with a senior Captain. Captains and Lieutenants will gain important leadership and technical experience as the Chief, Operations Engineering Element or OIC, Requirements and Optimization (R&O) Section. Both positions assume supervisory responsibility.

2.2.3.1.5. The *Explosive Ordnance Disposal (EOD) (CED)* flight provides identification, evaluation, diagnosis, render-safe, recovery, and final disposition of foreign or domestic conventional, nuclear, chemical, and countering the threat of biological unexploded ordnance (UXOs), IEDs and weapons of mass destruction (WMDs). Flights support on and off-base worldwide response to aerospace systems/vehicles and conventional munitions; counter-IED operations, combating WMDs; nuclear weapon and response Task Force (RTF) operations; UXO and recovery of airbases denied by ordnance (RADBO) operations; operational range clearance; mortuary services; defense support to civil authorities (DSCA); Irregular Warfare (IW) security force assistance, counterinsurgency (COIN), stability operations, humanitarian mine assistance (HMA) and building partnership capacity (BPC); as well as Very Important Persons (VIP) protective support to US Secret Service, Department of Homeland Security and Department of State. Those CE officers selected for EOD positions must attend lengthy specialized training before assuming these duties. CE officers assigned to the EOD flight may serve as the EOD Flight Commander; EOD Range Flight Commander; Chief, EOD Operations Element; or Chief, EOD Support Element.

2.2.3.1.6. The *Fire Emergency Services (CEF)* flight provides incident command for all multi-agency responses, crash/rescue response to flightline, structural fire response, rescue services, and fire prevention services in order to minimize negative consequences of emergency incidents. The scope of services includes releases of hazardous materials (including CBRN) resulting from accident, natural causes, or intentional use as a WMD; fires that endanger people, property, or the environment regardless of the property involved (wild land, equipment, buildings, aircraft, etc.); fires in nearby federal agency facilities in the event normal FES are inhibited; persons trapped or otherwise unable to escape a dangerous situation; pre-hospital medical emergencies (non-transport); or intervention at other emergency situations such as natural or manmade disasters that threaten life, property or the environment. CE officers are not assigned to this flight. However, CE officers assigned to base level should become familiar with fire department operations and prevention, as these functions and personnel mutually support other CE flights and are integral to the success of the CE unit mission.

2.2.3.2. RED HORSE squadrons offer CE officer tactical, applied field experience for developing leadership skills and technical expertise in both design and construction. RED HORSE provides air component commanders a dedicated, flexible airfield and base heavy construction and repair capability, along with many special capabilities that allow Combatant Commanders to move and support missions as the air order of battle dictates. RED HORSE units are capable of being self-sufficient for 30 days and indefinitely upon re-supply and are capable of independent operations in higher, non-permissive threat level environments outside a forward operating base or collocated operating base. CE officers who desire to apply for RED HORSE positions should contact the CE Assignments Team (AFPC/DPALB) for more information on the process. RED HORSE CE officers serve as design engineers, construction project managers, flight commanders, and can serve as site OICs when deployed on contingencies or troop training projects. While RED HORSE experience is a valuable contribution to the CE officer's development, the CE officer should also seek to balance his/her development with traditional base-support CE assignments as well. In short, the CE officer should not attempt to treat RED HORSE as a separate career track, but rather just one subset of several important capabilities that the CE officer career field is tasked to provide. Refer to AFI 10-209, *RED HORSE Program*, for program details.

2.2.3.3. Headquarters Staff. After spending time at squadron level, staff billets provide the CE officer exposure to corporate decision-making process, an opportunity to develop a "big picture" view of the strategic/operational mission, and a chance to hone his/her communication skills. Increased job responsibility is key to developing areas of expertise that will enhance leadership skills. AF staff positions in the CE career field include, but are not limited to Air Staff, AFIMSC and its primary supporting units including AFCEC, MAJCOMs, and Numbered Air Forces (NAFs). As a staff officer, CE officers gain experience working cross-functional issues with other career fields in operational planning groups to implement programs and policies.

2.2.3.4. Joint Experience. CE officers can expect to be assigned to or deployed with a non-AF organization at some point in their career. Joint assignments provide good experience and qualified experiences are depicted on official records. The experience may make a positive difference for some assignments and promotions.

2.2.3.4.1. Joint Assignments. Joint Assignments. For CGOs, there are several assignment opportunities with Naval Military Construction Battalion, Defense Agencies, with several more in the deployed environment with Corps of Engineers or Department of State. As Field Grade Officers (FGOs), there are joint opportunities with 32E FGO billets, to include the Joint Chiefs of Staff, combatant commands, NATO staffs, and international exchanges.

2.2.3.4.2. Joint Qualified Officer (JQO). The Goldwater-Nichols Act emphasized the need for services to provide senior leaders with joint

experience. Therefore, DoD tracks the experience and education of FGOs to deliberately track “joint” qualification. To become a JQO, CE officers must accumulate 36 “points,” in addition to completion of requisite Joint Professional Military Education (JPME). Not all joint experience qualifies for joint credit. More detailed information can be found under DoDI 1300.19, *DOD Joint Officer Management (JOM) Program*. To submit for Joint credit, visit the Joint Qualification System at the following web address: <https://pki.dmdc.osd.mil/appj/jqs/init.do>.

2.2.3.5. Developmental Assignments. Some CE officers serve in career broadening or developmental assignments outside the career field. These opportunities include AFROTC, OTS, SOS, ACSC, AFIT, or USAFA Instructor, Executive Officer, Commander’s Action Group member, Recruiting Services, among many others. While these jobs give CE officers an opportunity to expand their experience and overall view of the AF, timing of these assignments is important. Career field release is required for most of these jobs, and interested CE officers should contact the 32E Officer Assignment Team (AFPC/DPALB) to determine eligibility for release. To ensure the CE officer receives and retains sufficient expertise and experience in the operational CE career path, CE officers should not plan on more than one developmental assignment.

2.2.3.6. Other Assignment Information. Job experience includes building depth through technical expertise early in the career, like design engineer or project/program manager, progressing to jobs that provide breadth of experience and supervisory opportunities, like element chief positions, and then progressing to other leadership positions such as a flight commander. The career field pyramid (see Figure 1) identifies various levels of experience and windows of opportunity the CE officer should consider when building depth and breadth. Although certainly not all-inclusive, it is intended to show that a balance of base level and staff experience, coupled with deployment experience and opportunities for career broadening, will build a strong foundation for CE officers.

2.2.3.6.1. Overseas Tours. The CE career field offers many opportunities to serve overseas, where the CE officer may often be exposed to working with a foreign government. Short tour overseas assignments offer prime opportunities to quickly fill gaps in professional development and to hone skills in a typically austere environment. CE officers can expect to spend a portion of their career overseas, either through long tours, short tours, or extended deployments.

2.2.3.6.2. Different MAJCOMs. Experience in several different MAJCOMs will provide the CE officer a broader view of the total AF mission and a deeper understanding of how all the “pieces” fit together.

2.2.3.6.3. Deployments. Deployments play a large part in the CE life and can offer a great deal of experience in a compressed time period.

2.2.3.6.4. Squadron and Wing Opportunities. There are many opportunities in the squadron and wing that CE officers should take advantage of to further their OPD. Junior CE officers should actively seek out advice and mentorship with NCOs, SNCOs, other CGOs, civilian supervisors, in addition to the Operations Flight Commander and Squadron Commander. This gives a broad range of perspectives on the AF career and OPD in general. CE officers should seek out ways to get involved in the squadron, in addition to their primary duty. For example, an in-house multi-craft construction program is a great way for a CGO to get involved in the design and project management of a large in-house construction project; in addition, it offers good preparation prior to deployment. Junior CGOs on their initial base-level tour should also seek to tour the operations flight shops, EOD, the Fire Department, and other flights within the squadron. Junior CE officers can also expect to take on a myriad of additional duties which will expose outside of their assigned positions, to include tasks leading up to higher headquarters inspections and manning the CE UCC or EOC during exercises. Outside the squadron, CE officers should seek out additional duty opportunities that will enhance their OPD, as these opportunities typically require working with many different organizations in the Wing. With endorsement of the CE Commander or staff director, CE officers can consider competing for a position as a Group or Wing executive officer, a position in commander action groups (CAG), or the Wing's inspector general. CE CGOs have opportunities to get involved in wing organizations such as the Company Grade Officers Council (CGOC). All of these opportunities can broaden an officer's perspective, improve networking beyond the CE squadron, and provide senior leader exposure.

2.2.3.6.5. Cross-Training. Some CE officers may be interested in voluntarily cross training to another career field. Release determinations are handled on a case-by-case basis depending primarily on manning in both the member's year group and the overall manning of the 32E career field. Manning in the gaining career field may also be considered. Contact the 32E assignments team (AFPC/DPALB) for more information.

2.2.3.7. Total Force Officers. The 32E career field includes CE officers from the Active component as well as the ARC. Officers from each component should become familiar with the capabilities of the others and expect to interface with them throughout their careers.

2.2.4. Officer Professional Development. OPD continues throughout our career and consists of developmental education, graduate education, professional continuing education, and professional registration and credentialing.

2.2.4.1. Developmental Education. Developmental Education (DE) is vital to OPD. DE is categorized into Primary, Intermediate, and Senior Developmental Education or PDE, IDE, and SDE, respectively, and is collectively referred to as Professional

Military Education (PME). IDE and SDE in-residence are highly selective programs. Therefore, if not selected to attend DE in-residence, officers should still complete the appropriate level of DE by correspondence or seminar. DE should be completed at officer's earliest opportunity to remain competitive for future opportunities. See section C of Part II of this document for more information on DE, to include sister-service PME, Education with Industry (EWI), fellowships, and other such opportunities.

2.2.4.2. Graduate Education. While Advanced Academic Degrees (AADs) are currently masked for promotion boards up to the member's O-6 boards, an appropriate AAD will likely enhance the CE officer's job performance and value to the AF. Because CE is a technical career-field, an appropriate AAD would include a degree in a Science, Technical, Engineer, and Mathematics, Project Management, or Business Administration field. Regardless of the AAD field, completion will show personal/professional growth. Every year, there are a number of opportunities for CE officers to gain AF-sponsored masters degrees, and in limited cases, doctorate-level degrees. A portion of these degrees require follow-on commitments for the officer to fill a faculty position at AFIT or USAFA. AAD opportunities are detailed in Part II, Section C.

2.2.4.3. Professional Continuing Education (PCE). PCE enhances technical and managerial skills by keeping us current in our jobs and the engineering industry. PCE credits can be obtained by attending courses at AFIT's TCES, DAU, colleges or universities, and commercial training organizations. Professional Engineers/Architects in the local area may also have information on the PCE courses that are available commercially. For list of available PCE courses through DoD, refer to Part II, Section B or visit both AFIT's TCES website, <http://www.afit.edu/CE/>, and DAU's website <http://www.dau.mil/default.aspx>.

2.2.4.4. Professional Registration and Credentialing. Professional registration (or licensure) is a significant step in the professional growth of CE officers. It is not mandatory for CE officers to be licensed, but registration enhances a CE officer's credibility and overall professional development, is highly encouraged, and will provide the CE officer with additional opportunities throughout his/her career, in and out of the military. When balancing the desire for registration, the CE officer should ensure it is not at the detriment of appropriate Developmental Education or job performance, as failure to meet standards in those areas will hinder chances of promotion, as professional registration/certification is not considered by promotion boards. Most states require four years of professional work experience and the successful completion of the Fundamentals of Engineering exam prior to taking the Principles and Practice of Engineering Exam to be recognized as a Professional Engineer (PE). PE licensure is governed by the National Council of Examiners for Engineering and Surveying (NCEES) and requirements vary from state to state. Registered Architect (RA) licensure is governed by the National Council of Architectural Registration Board (NCARB), and requirements also vary for each state. CE officers can add a "special experience identifier" to their official military

record (Career Development Brief (CDB)) after successful professional registration or licensure; check with the Military Personnel Section for details. In addition to the PE/RA license, professional certification options include, but are not limited to, Project Management Professional (PMP), Certified Facility Manager (CFM), Leadership in Energy and Environmental Design (LEED) AP certification, etc. Most of these professional registrations and certifications require annual or biannual continuing education credits to maintain currency. PCE courses, including those offered by AFIT and DAU, can help fulfill many of these continuing education requirements.

2.2.4.5. Contingency Experience. Contingency operations (deployments/natural disasters, field exercises, etc.) provide CE officers a unique opportunity to sharpen their technical and leadership skills. CE officers should continually seek out opportunities to participate and lead in contingency operations.

2.2.4.5.1. CE Officer Training for Contingencies. CE officers, are required to complete accession training to include attending WMGT 101, Air Force CE Basic Course, as the minimum training requirements prior to being eligible for deployment. AFIT's contingency engineering course (WMGT 585) is targeted for officers with 8-12 years of commissioned service. Due to deployments to the joint operating environment, CE officers should also seek valuable training offered by the Joint Engineer Operations Course (JEOC), WMGT 590.

2.2.4.5.2. Silver Flag Exercise. Silver Flag is an excellent opportunity for CE officers to train and exercise their contingency skills in an environment free from the distractions of home station. Attendance is SORTS reportable for certain UTCs on a frequency dictated in AFI 10-210, *Prime BEEF Program*.

2.2.4.5.3. Expeditionary Skills Training (EST). Depending on the threat environment expected on a deployment, a variety of pre-deployment training will be required. These training elements may include, but are not limited to, Tier 2 Deployment Ready Expeditionary Skills Training, Evasion and Conduct After Capture (ECAC) Training, Combat Airman Skills Training (CAST), or Combat Skills Training (CST). Training requirements are dictated by line remarks and vary depending on threat and mission.

2.2.5. Personal and Professional Growth. CE Officers should strive to improve themselves beyond primary duties through personal and professional growth. Alternate aspects of a CE Officer's life can include some or all of the following: family, faith, fitness, hobbies, professional readings, continuing education, involvement in professional associations, voluntary organizations, and/or local communities. The officer will find that by having multiple activities outside of work will contribute to the officer's resiliency, character development, professional success, and prevent burn-out.

2.2.5.1. Officer Professional Development (OPD) Plan, Airman Development Plan (ADP) and Reserve-Officer Development Plan (R-ODP) . Every officer should meet with their Commander and/or supervisor at least annually to develop and discuss (among other things) a career development plan to include personal and professional goals. There are tools to map out an officer's career to include jobs, DE, graduate education, PCE, career broadening, short and long tours, promotion boards, etc. This PD plan may then complement the officer's Airman Development Plan (ADP) or R-ODP that should also be updated at least annually. The ADP/R-ODP is the officer's voice in the assignment process. It allows each officer to state his or her short and long-term intentions for assignments. As a rule of thumb, ADPs and R-ODPs should be updated annually as part of formal feedback sessions, as well as prior to deployment due to the possibility of limited connectivity in the deployed environment. Each officer should take individual responsibility for ensuring the appropriate amount of time is devoted to his or her OPD.

2.2.5.2. Civil Engineer Development Team (DT). The Active Duty and Reserve CE DTs are chartered to meet once per year to provide guidance and mentoring to AF CE officers and civilians. The DTs are responsible for vectoring the right officer to the right type of job at the right time, mutually benefitting the AF and the officer. This includes recommendation to schools, commanders, and other selective positions. For a more in-depth description of the DT program, see AFI 36-2640, *Executing Total Force Development*, as well as AFRCI 36-2640, *Executing Air Force Reserve Force Development*.

2.2.5.2.1. Active Duty 32E DT. The Active Duty DT is chaired by the Director of Civil Engineers (HQ USAF/A4C) with select senior CE and operational representatives as members. The Active Duty DT does not review all officers' records annually but will target CGO and FGO groups that are eligible to move during the next assignment cycle. The CE officer, therefore, should ensure he/she submits an updated Airman Development Plan (ADP) through his/her commander (or senior rater for command/DE eligible officers) to AFPC well before the 32E DT meets.

2.2.5.2.2. The Air Force Reserve DT. The AF Reserve DT is chaired by the AF Reserve Command Civil Engineer (HQ AFRC/DA7) with select senior Reserve CE Officers as members representing all Reserve statuses: Air Reserve Technician (ART), Active Guard Reserve (AGR), Traditional Reservist (TR) and Individual Mobilization Augmentee (IMA). It is imperative that ARC CE officers update their R-ODPs annually to allow the DT to provide guidance and recommendations on opportunities that will broaden and enhance careers. These vectors are based on the needs of the AF and ADPs for active duty (AD) CE officers or R-ODPs for AFRC CE officers in the AGR program.

2.2.5.3. CE Strategic Communications/CE Portal. The AF CE Portal provides a link to the latest in CE strategic communications, publications and messages from the

Air Force Director of Civil Engineers (CEnterline and Engineer Compass). Also, the link captures the latest in CE Playbooks, A-files and a host of other key resources that provide technical support for CE officers assigned throughout the AF. The CE portal may be found at the following website:

<https://cs1.eis.af.mil/sites/ceportal/Pages/default.aspx>.

2.3. CE Occupational Badges. The CE badge reflects a great history and tradition. When worn, CE officers will be recognized by fellow Airmen as having achieved an expected level of competence. A multitude of engineers before established this expectation through excellent service in both peace and war. Eligibility criteria for award and wear of AF occupational badges can be found in AFI 36-2903, *Dress and Appearance of Air Force Personnel*, Chap 10.

2.3.1. CE Badge Heraldry. The gear wheel and compass have historically been used to represent the engineering profession, in both the military and private sector. The gear represents the essence of engineering: applying scientific principles and technology to practical ends. The gear is an element (representing the built environment) that meshes with others (weapon systems and trained personnel) to enable the AF to perform its mission. The compass is a precision tool historically used by engineers in designing and constructing facilities and equipment. The gear and compass together symbolize all the diverse specialties within the AF CE career field. Finally, the wings help to portray the fundamental linkage between engineering and aviation and that the built environment is the foundation supporting the AF mission and people.

2.3.1.1. Basic Badge. The basic badge is awarded upon successful entry into the career field at the completion of WMGT 101, Air Force CE Basic Course.

2.3.1.2. Senior Badge. The senior badge adds a star to the top of the badge and is awarded after seven years in the specialty.

2.3.1.3. Master Badge. The master badge indicates the final step in the occupational series and adds a wreath around the star and is awarded after 15 years in the specialty.

2.3.2. Other CE Badges. CE Officers who have earned EOD or EM badges may wear their respective badge above the CE badge when serving in an EOD or EM position; otherwise the EOD or EM badge should be worn under the CE badge. For more information on the wear and award of all badges, refer to AFI 36-2903.

2.3.2.1. EOD Badge. The EOD basic occupational badge is awarded to those individuals who complete the formal training requirements of the Naval School Explosive Ordnance Disposal (NAVSCOLEOD), Det 3, 366 TRS, Eglin AFB, Florida. The senior badge and the master badge are awarded by cumulative time after award of the basic EOD badge served in an EOD billet, as a commander of a squadron with an EOD flight, or a staff position directly in charge of an EOD program and upon certification letter signed by the EOD flight chief and approved by commander. The cumulative time required for the senior EOD badge is four years and for the master EOD badge is eight years.

2.3.2.2. Emergency Management Badge. The EM occupational badge is authorized for only those individuals who complete the 3E9X1 EM Apprentice Course at Ft Leonard Wood. Since this course is no longer required for R&EM Flight Commanders, most officers will not wear this badge.

2.3.2.3. Base Fire Marshal Badge. Base Fire Marshals may wear the Fire Chief duty badge after completing the Fire Marshal Course, and may continue to wear it in all subsequent duty positions that include FES management and oversight responsibilities. Additionally, the BCE (and squadron commander if BCE and squadron commander duties are separate) is authorized to wear the Fire duty badge provided there is a FES flight, management or oversight responsibilities.

2.4. AFPC, CE Officer Assignments. The career assignment personnel work AD CE officer assignments at HQ AFPC/DPASB. CE Officers may look for assignment opportunities in the Assignment Management System (AMS), 32E Officer Assignment Team MilBook site, and 32E MyPers site. The CE assignment officers can be reached at DSN 665-3451/3452 or Commercial (210) 565-3451/3452. Reserve CE officer vacancies are posted on Reserve Management Vacancy System via the Portal. The Reserve CE officer vacancies will also be posted on the AFR 32E Career Field Management page on milBook at <https://www.milsuite.mil/book/groups/af-32e-career-field-management>. Additional volunteer opportunities can be found on Volunteer Reserve System (VRS) via the portal and Personnel Force Innovation (PFI) via <http://pfi.dod.mil/>.

Section C – Proficiency Training Requirements.

3. Specialty Description.

3.1. Education: The following education is required for entry into AFSCs 32E1X as indicated:

3.1.1. 32E1X: Undergraduate or graduate degree is mandatory in architecture from a school accredited by the National Architectural Accrediting Board (NAAB); or, undergraduate or graduate degree is mandatory in civil, electrical, environmental, construction, architectural, mechanical, or industrial engineering from a school whose respective program is accredited by the Accreditation Board for Engineering and Technology (ABET).

3.1.2. 32E1X Waivers: Waivers for other architecture and engineering degrees not specified above, but from an accredited school require submission of a waiver package IAW AFI36-2101, *Classifying Military Personnel*. Officers with architecture degrees from a non-accredited school require must demonstrate a path to professional registration according to the National Council of Architectural Registration Boards (NCARB) before being accepted into the 32E career field. Officers with engineering degrees from a non-accredited school must have passed the National Council of Examiners for Engineering and Surveying (NCEES) Fundamentals of Engineering (FE) exam to be considered eligible for

the 32E career field. Ultimate waiver authority rests with HQ USAF/A4C, and packages are coordinated at CFM and AFIT/CE as well as AFPC Classifications. For more information on needed documentation to include in the waiver package, contact AFPC/DPALBC.

3.1.3. 32E1A/C/E/F/I/J: Undergraduate or graduate degree in the area specified by section 3.4.

3.1.4. 32E1G: Any 32EX may be assigned to positions requiring suffix G. Also, assign the G suffix to individuals with approved waivers into the career field that do not meet any of the other specialty criteria.

3.2. CE Formal Training: The following training is mandatory for award of the AFSC indicated:

3.2.1. 32E3X: All AD CE shall complete the AFIT course WMGT 101, Air Force CE Basic Course, to become a 32E3X. Per HQ USAF/A4C policy letter, 32E officers must also complete WMGT 101 prior to deploying. **NOTE:** Starting in FY14, Total Force CE officers all attend WMGT 101. Prior to FY14, Air Reserve CE officers attended a separate AFIT courses WMGT 102, Introduction to Base CE Organizations for Reserve Forces, and WMGT 484, Reserve Forces Air Base Combat Engineering, in-lieu of WMGT 101. These Reserve-component specialized courses are no longer offered nor required.

3.2.2. 32E3B: Completion of WMGT 410, Readiness and Emergency Management Flight Officer Course.

3.2.3. 32E3H: Completion of initial EOD skills training course at (NAVSCOLEOD, Eglin AFB.

3.3. Experience: The following experience is mandatory for award of the AFSC indicated:

3.3.1. 32E3A/B/C/E/F/G/H/I/J: A minimum of 12 months in the specialty following the completion of WMGT 101 is required to upgrade to 32E3X.

3.3.2. Other: Upgrading will be in the specialty relating to their academic discipline or suffix G - General Engineer, dependent upon duty position. CE officers whose academic area is not compatible with suffixes A, C, E, F, I or J will be upgraded in suffix G only.

3.3.3. Staff Level: CE officers serving in staff level positions will hold the AFSC of 32E4 for the duration of their staff time. Officer must be in 32E4 authorized position. This AFSC indicates staff level officer and does not qualify as an upgrade.

3.4. Specialties:

<u>Suffix</u>	<u>Definition</u>
A.....	Architect/Architectural Engineer

.B.....	Readiness and Emergency Management Engineer
.C.....	Civil Engineer
.E.....	Electrical Engineer
.F.....	Mechanical Engineer
.G.....	General Engineer
.H.....	Explosive Ordnance Disposal Engineer
.I.....	Industrial Engineer
.J.....	Environmental Engineer

Note: Award of 32EXB or 32EXH requires a degree in one of the disciplines listed for 32EXA/C/E/F/G/J

4. Developmental Levels (DL). Refer to Appendix 1, Specialty Training Standard, for a detailed description of the DL program.

5. Duty Titles. Upon arriving at a duty station, CE officers and their supervisors must set their duty title via the AF Form 2096, Classification/On-The-Job-Training Action, or local procedures. All duty titles are approved at AFPC prior to being updated in the officer's official record. The standard list included in Appendix 2 is intended to assist in determining the proper duty title for the CE officer.

Section D – Resource Constraints.

6. Resources Limitations. For the foreseeable future, dwindling resources will put strains on the career field to adequately cover all training. Priority will go to mission essential training courses, then focus on mission enhancement training. TCES continues to be proactive in developing Distance Learning courses to mitigate the effects of resource limitations.

6.1. TDY Funding. If the AF lacks the appropriate resources for the officer to complete training listed in this document within the targeted time frame, the officer should make every attempt to complete the training as soon as resources become available.

6.2. Longer Tours. Additionally, limited Permanent Change of Station (PCS) funding will typically yield longer tours. Therefore, officers should expect to be rotated to other duties at least once in each multi-year tour to ensure he/she is gaining sufficient breadth of experience.

PART II

Section A – Course Training Standards

1. Task Lists. Program Action Directive (PAD) 07-02 and PAD 12-03 (and their associated Programming Plans (PPLAN)) define the tasks assigned to each of the flights within a typical CE squadron. Reference those documents available on the CE portal (<https://cs1.eis.af.mil/sites/ceportal/Pages/default.aspx>) for more information regarding the typical flight-level assigned tasks. General tasks that CE officers may be expected to perform at squadron level and higher are also included.

Section B - Training Course Index

2. Formal Education and Training Courses. The courses listed in this section are recommended for the positions indicated. Note that due to funding limitations, some courses may not be available every year. Refer to AFIT's TCES web page at <http://www.afit.edu/CE/> for CE PCE courses. Depending on the degree of the CE officer, suffix and duty position, focus on those WENG, WENV, and WMGT courses designed for that particular specialty or duty position. These courses should be taken at the earliest opportunity to obtain a higher level of technical competence. These courses are designed to support the AF capabilities in AF Doctrine Annex 3-34, *Engineer Operations*. Many of the courses shown below fall into this category, and by taking them at the earliest opportunity, the CE officer is better prepared for future leadership positions.

2.1. Courses for New CE Officers (0-2 years, Any Squadron-Level Job).

2.1.1. WMGT 101, Air Force CE Basic Course

2.1.2. WMGT 423, Project Programming

2.1.3. WMGT 422, Project Management

2.1.4. WMGT 421, Contracting for Civil Engineering Course

2.2. Courses for CE Officers (DL2) (2-6 years, Any Base Level Job).

2.2.1. WENG 550, Airfield Pavement Design and Maintenance

2.2.2. WENG 555, Airfield Pavement Construction Inspection

2.2.3. WENG 481, Simplified Facility Design

2.3. Recommended Position Based Courses (0-10 years): The following courses are recommended based on duty position.

2.3.1. WENG 470, Introduction to Electrical Systems

2.3.2. WENG 571, Electrical Power Systems Design

2.3.3. WENG 460, Introduction to Mechanical Systems

2.3.4. WENG 561, Heating, Ventilation, and Air Conditioning Analysis and Design

2.3.5. WENG 520, Comprehensive Planning Development

2.3.6. WMGT 426, SABER Management Course

2.3.7. WMGT 436, Operations Support

2.3.8. WMGT 531, Installations Management Flight Comanders Course

2.3.9. WMGT 580, CE Mid-Level Development Course – Sustainable Design and Development

2.4. Readiness and Emergency Management Flight Officer.

2.4.1. WMGT 410, Readiness and Emergency Management Flight Commander Course

2.4.2. MLMDC 813, AF Incident Management Course (formerly the On-Scene Commander's Course)

2.5. EOD Flight Commander (refer to 32-3001, *Explosive Ordnance Disposal Program, for more detail on required, essential and recommended training*).

2.5.1. Basic EOD School (Badge awarding course) at NAVSCOLEOD, Eglin AFB

2.5.2. WMGT 433, EOD Flight Commander Course

2.5.3. Advanced Improvised Explosive Device Defeat (AIEDD) Course (JBAZN3E87100NA) at NAVSCOLEOD, Eglin AFB

2.5.4. Joint Nuclear EOD (JNEOD) Course (J5AZO3E871 00DA) at Kirtland AFB

2.5.5. Level 3 Incident Reponse (Nuclear) Training at Kirtland (J5OZD32 E3G 01DA)

2.5.6. Joint EOD Homemade Explosive Training at Los Alamos (ATF) or Huntsville, AL

2.5.7. Tactics and Operations Integration Course (TOIC) at Bowman, SC

2.5.8. Global Counter-Improvised Explosive Device Threat Assessment Training

2.5.9. Other courses as appropriate. Refer to 3E8X1 CFETP, Section D for a full list of available courses and requirements.

2.6. Engineering Flight Commander.

2.6.1. WMGT 420, Engineering Flight Commanders Course

2.6.2. Other courses as appropriate

2.7. Senior Captains & Majors (Over 8 Years of Commissioned Service).

2.7.1. WMGT 585, Contingency Engineer Command Course

2.7.2. WMGT 590, Joint Engineer Operations Course

2.8. Operations Flight Commander

2.8.1. WMGT 430, Operations Flight Commanders' Course

2.9. Civil Engineer Squadron Commander (CE SQ/CC). Attend the following courses at your earliest opportunity to prepare for the responsibilities of a CE SQ/CC.

2.9.1. Mandatory Training.

2.9.1.1. WMGT 400, Civil Engineer Commander/Deputy Course

2.9.1.2. MAJCOM Sq/CC Orientation (Required for all Sq/CCs)

2.9.1.3. Fire Marshal Course (X30ZR32E4 0F1A) (Required for Sq/CCs overseeing FES activities)

2.9.1.4. MLMDC 813, AF Incident Management Course (Required to serve as an Emergency Operation Center Director)

2.9.2. Recommended Training.

2.9.2.1. Senior Leader NBCC Course

2.9.2.2. General Officer Quarters (GOQ) Management Course

Section C - Other Professional Training and Education.

3. Developmental Education (DE). DE provides CE officers with educational exposure to the Profession of Arms and is a prerequisite for advancement to the senior ranks. DE is mandatory and is offered in residence or by correspondence. Below are the AF DE programs. Other, non-AF programs are detailed in the annual DE in-resident program call for nominations.

3.1. DE Nomination Process. Some officers will be identified as DE "Selects" as part of their promotion board. These officers are guaranteed the opportunity to attend DE in residence during one of their eligible years. Under current AF policy, DE "Selects" are ineligible to take DE by correspondence. During years of eligibility, an officer who is not a "Select" can apply to be a DE "Candidate." Senior Raters will endorse DE Selects and a limited number of Candidates to the DE Development Board (DEDB) or Reserve DE Designation Board (RDEDB) to attend IDE or SDE in residence.

3.2. DE Selection Process. In 2015, the AF made a slight revision on the DE Board process. The DE Board will centrally screen nominees and send the list of those selected to attend DE in residence to the functional DTs. The functional DTs can then recommend specific DE programs for each officer. The DE Board determines the final matches of personnel to specific DE programs, then releases the list.

3.3. The base education office and/or MAJCOM functional manager can provide more complete information on criteria and enrollment procedures for DE non-residence programs. AFPC notifies senior raters when nominations for in-residence DE are due, and your organization should advertise the opportunity to apply. DE in-residence is centrally funded and subject to AF-wide competition. If an officer is not selected for DE in-residence, he/she should complete DE through correspondence or seminar.

3.4. Primary Developmental Education (PDE): Squadron Officer School (SOS).

3.4.1. Curriculum: Instruction in leadership competencies in AFDA1-1, *Force Development*, as well as Officership, Leadership, Problem Solving, Core Values, and the AF as an institution in the profession of arms. Students strengthen their Officership and Leadership techniques in classroom discussions and field exercises and experience followership in support of other student leaders.

3.4.2. Residence: Five weeks temporary duty (TDY) at Air University, Maxwell AFB, Montgomery AL. <http://www.au.af.mil/au/soc/sos.html>.

3.4.3. Correspondence: Refer to <http://sos.maxwell.af.mil/>. Currently, officers are ineligible to take SOS by correspondence until after 7 years of commissioned service.

3.4.4. In-Residence Criteria: CE officers with more than four but less than seven years Total Air Force Commissioned Service (TAFCS) who are not in a failed or deferred promotion status. CE officers will be selected via senior rater. Currently, SOS is 100% opportunity.

3.5. Intermediate Developmental Education (IDE).

3.5.1. Curriculum: A number of schools are available, but Air Command and Staff College (ACSC) is most commonly attended by AF personnel; contact base training office for a list of other schools. The ACSC program includes warfighting at the operational level, doctrine, jointness, the profession of arms, and analytical and practical tools needed for leadership in the application of air and space power. <http://acsc.maxwell.af.mil/>.

3.5.2. Residence: Ten months at Maxwell AFB for ACSC. (Other residence programs may vary)

3.5.3. Correspondence/Seminar: Refer to <http://acsc.maxwell.af.mil/distance-learning.asp>.

3.5.4. In-Residence Criteria: Majors are eligible to be considered for IDE in residence via the DEDB/RDEDB process for 3 academic years.

3.6. Senior Developmental Education (SDE). (Other residence programs may vary)

3.6.1. Curriculum: A number of schools are available, but AF engineers commonly attend Air War College (AWC); contact base training office for a list of other schools. The AWC program primarily focuses on war fighting, the application of air and space power in joint or combined operations, evaluation of national security and military strategy formulation, defense resource allocation and management, trends and sources of conflict in the international system, and the execution of strategy in a multipolar world.
<http://www.au.af.mil/au/awc/awchome.htm>.

3.6.2. Residence: Ten months at Maxwell AFB for AWC.

3.6.3. Correspondence/Seminar: Refer to <https://ausis.maxwell.af.mil/SIS/app/>.

3.6.4. In-Residence Criteria: Lieutenant Colonels are eligible to be considered for SDE in residence via the DEDB/RDEDB process for 4 academic years.

4. Graduate Education.

4.1. An appropriate graduate degree early in CE officer's career will enhance job performance, build credibility as an engineer and add value to the AF. The completion of an AAD is a discriminator for promotion to colonel, so it is highly recommended that CE officers complete this milestone approximately 6 months prior to meeting their colonel's boards (or risk not being promoted). There are five basic routes to getting an AAD degree while on active duty:

4.1.1. AF-Supported Off-Duty Education Programs. AF Tuition Assistance (TA) programs can pay as much as 100% of tuition costs. This is the most common method used by CE officers. Visit base education office or research online to determine what programs are available. Many CE officers earn an AAD in a technical or engineer management area, which builds on the CE officer's undergraduate degree and experience.

4.1.2. AFIT Graduate Engineering Management (GEM) Program. This is a competitively selected program available to approximately 10-20 CGOs each year. The selected CE officers pursue an AAD full-time while assigned to AFIT at Wright-Patterson AFB, OH. CE officers completing an AFIT sponsored GEM degree will be expected to serve in an targeted AAD position at base level or AFCEC. For more information visit the AFIT website at www.afit.edu.

4.1.3. Faculty Preparatory Programs: TCES at AFIT and the Air Force Academy's Department of Civil and Environmental Engineering (HQ USAFA/DFCE) sponsor CE officers for graduate engineering degrees (MS and PhD) at civilian universities followed by a tour as a faculty member. These CE officers may be expected to serve in an "Intervening Operations Tour (IOT)" prior to returning for instructor duties. For more information visit their web sites: AFIT/TCES: <http://www.afit.edu/CE/> . HQ USAFA/DFCE: <http://www.usafa.edu/df/dfce/index.cfm>.

4.1.4. Civilian Institutions (CI) Program: CE officers are sometimes selected to attend graduate engineering at civilian universities in preparation to fill certain billets that require specialized technical advanced degrees. Only a few of these positions are available each year. Most of these technical billets are at either the AFCEC or RED HORSE. For information contact the AFPC CE Assignments branch at DSN 665-3451/3452.

4.1.5. IDE and SDE In-Residence Programs: Most of these programs offer the opportunity to earn non-technical AADs.

4.2. Each of the methods has its advantages and disadvantages. CE officers should determine their best suited program. What is clear is that AF Civil Engineering is a demanding and competitive field and possession of a graduate degree will maximize opportunities for the CE officer.

5. Contingency Training. Various types of contingency training exist for CE officers. Home-Station exercises and Prime BEEF days make up a significant part of this training. Also, the final week of WMGT 101 allow CE officers to get hands-on training with CE Contingency Assets. CE officers assigned to a unit with a deployment mission, will eventually experience additional training at one of the three Silver Flag sites. All CE contingency training requirements are identified within the training tables associated with AFI 10-210, *Prime BEEF Program* and AFI 10-209, *RED HORSE Program*. The Silver Flag exercise is another method to gain contingency training.

6. Professional Continuing Education (PCE).

6.1. AFIT PCE Courses. Refer to AFIT/TCES's web page <http://www.afit.edu/CE/> for the latest PCE offerings. Other opportunities may exist locally through seminars, workshops, and classes. Contact the unit or MAJCOM training manager for more information.

6.2. Distance Education Programs. In addition to resident courses, TCES at AFIT serves thousands of students annually through distance education programs. On-site courses, on-site seminars, satellite broadcasts, and digital recordings deliver job-related education to the workplace. Refer to the AFIT/TCES web page <http://www.afit.edu/CE/> for the most current information on all course offerings.

7. Acquisition Courses. Several positions within the CE careerfield will benefit from the member acquiring Level 2 or Level 3 Facilities Engineering (FE) certification under DAWIA. CE Officers filling these positions will have the opportunity to complete the requisite training and track continuing education hours, though it is not mandatory at this time. Currently, ACQ101 and FE201 are Distance-Learning courses which are required to earn a Level 2 FE certificate. Some CE officers will have the opportunity to work in systems acquisition and/or research and development (R&D) positions which require more systems-focused courses offered by DAU. For more information on DAU courses, refer to: <http://www.dau.mil/default.aspx>.

Section D – Leadership and Supervision.

8. Supervising CE Officers.

8.1. Commander's Involvement Program. Commanders and Staff Directors have the best insight into the officer's talents, strengths, limitations, and OPD needs. Their responsibilities with respect to the professional grooming and assignment of their CE officers occur in two phases: Phase I offers general professional development guidance, and Phase II relates to specific assignments for which an officer volunteers. Refer to AFI 1-2, Commander's Responsibilities for more discussion on the Commander's role in developing leaders. Commanders/Directors can find resources mentoring CE officers at CE officer myPers site. If sufficient timing, opportunity and operational tempo permits, Commanders/Directors should attempt to rotate the officers to multiple positions within their organization to expose the CE Officer to different technical areas and leadership opportunities.

8.2. Officer Evaluation System (OES). AFI 36-2406 *Officer and Enlisted Evaluation Systems*, discusses the OES. This document includes information on the objective of the program, documenting job performance as well as dealing with Officer Performance Reports (OPRs) and Promotion Recommendation Forms (PRFs). Access the publication and forms on AF e-publishing (www.e-publishing.af.mil) site through the AF Portal (www.my.af.mil).

8.3. Officer Promotion System. . Detailed information on such things as promotion opportunities, board timing,, selection criteria, and selection boards are included. AFPAM 36-2506, *You and Your Promotions - The Air Force Officer Promotion System*, contains additional information on officer promotion as well as selective continuation. Access both documents on AF e-publishing. Promotion board schedules, eligibility, and milestones are available on the AFPC home page through the AF Portal.

9. Supervising Enlisted.

9.1. The Enlisted Force Structure. AFI 36-2618, *The Enlisted Force Structure*, defines the enlisted force structure and implements AFPD 36-26, *Total Force Development*. It establishes leadership and development levels, responsibilities, and official terms of address for enlisted Airmen. It describes special senior noncommissioned officer positions and standardizes duty titles. This AFI is accessible on AF e-publishing through the AF Portal.

9.2. Enlisted Evaluation System (EES). AFI 36-2406, *Officer and Enlisted Evaluation Systems*, is the governing document for the EES. It includes information on such areas as performance feedback, enlisted performance reports (EPRs), as well as other pertinent information.

9.3. Airman Promotion Program. AFI 36-2502, *Airman Promotion/Demotion Programs*, covers the enlisted promotion program. It contains information on promotions from Amn through CMSgt.

9.4. Enlisted Training. AFI 36-2201, *Air Force Training Program*, covers the management and development of enlisted training.

10. Supervising Civilians.

10.1. Leadership Opportunity. A CE officer will likely have the opportunity to supervise federal or local national civilians, which requires specific knowledge and training. These areas include union agreements, civilian appraisals, time keeping, etc. The organization's senior civilian and servicing Civilian Personnel Office (CPO) are resources in learning specifics on the local processes and requirements in supervising civilians.

10.2. Civilian Performance Program. Refer to AFI 36-1001, *Managing the Civilian Performance Program*, for the latest information on how to manage the civilian performance program. This instruction includes information on such issues as: performance planning and appraisals, incentive awards, monetary incentive awards, time off incentive awards, honorary incentive awards, dealing with performance problems, as well as keeping records.

11. Supervisory Training Program. Initial training for all newly assigned supervisors helps bridge the gap between the skills required at the working level and those required at the supervisory level. Before first-level supervisors assume their new duties, or within six months after assignment to a supervisory position, they will be provided the initial training described below.

11.1. Air Force Supervisor's Course. This course is designed to provide first-level supervisors, regardless of organizational component, with leadership and management skills required in supervisory positions. The servicing CPO will have more information on available training for supervisors of civilian employees.

11.2. Civilian Personnel Management Course (CPMC). This course is designed to provide military and civilian first-level supervisors with background information and an understanding of applicable personnel laws and regulations needed to effectively carry out their civilian personnel management responsibilities. The servicing CPO will have details on this course and can apply "equivalency" credit, if applicable.

11.3. Overseas. MAJCOMs and servicing CPOs in overseas areas develop and present training courses for military and civilian supervisors of local national (LN) employees to meet local needs. No standard AF course has been developed due to the wide diversity in LN personnel programs.

12. Awards. One of the most important responsibilities of being a supervisor is to properly recognize and reward subordinates for exceptional performance. AFI 36-2803, *Air Force Military Awards and Decorations Program*, contains the latest information on the AF Awards and Decorations Program. This guidance document is accessible on AF e-publishing. Some other programs are listed below:

12.1. The CE Awards Program. The CE Awards Program is an annual program designed to recognize and reward outstanding performance in a number of different categories specific to the CE enterprise. AFI 36-2817, *Civil Engineer Awards Program*, covers the latest information on the CE Annual Awards Program and is accessible on AF e-publishing through the AF Portal.

12.2. Squadron/Wing Recognition Programs. Local recognition programs vary by location. Contact the squadron's first sergeant or section commander for a full listing of recognition programs available.

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL

TIMOTHY S. GREEN, Brig Gen, USAF
Director of Air Force Civil Engineers
DCS/Logistics, Engineering and Force Protection

Appendix 1

Specialty Training Standard

32EX, CIVIL ENGINEER OFFICER



This document does not formally implement an on the job training requirement for CE officers. Completion of these specific tasks or attainment of developmental levels is neither required “upgrade training” for CE officers nor a prerequisite for the wear of a specific badge. Instead, the Specialty Training Standard and included Education and Training Task List should serve as a guide as to what the 32E career field values for professional development for CE officers and their commanders.

Qualitative Requirements

A.1 Developmental Levels. DLs are descriptive terms that categorize a CE officer's training and experience. DLs should be used as mentoring tools by supervisors, commanders, and staff directors to guide recommendations on next assignments, special duties, and academic goals. More importantly, it should be used by the CE officer as a self-assessment to guide them as to where he/she need to gain experience. As every CE officer will have a distinct career path and a unique set of experiences, the DL tasks are those minimum, core competencies that the CE officer should strive to achieve in order to be competent at the next higher level of CE duties.

A.1.1 DL Requirements and Intent.

A.1.1.1 DL 1 “Familiarization” Level. Complete WMGT 101, Air Force CE Officer Basic Course, demonstrate core competencies listed in Appendix 1, Table 1, and performed CE Officer duties for at least 12 months. Postures the CE officer to be able to contribute more significantly to the unit's mission, and operate in a contingency environment.

A.1.1.2 DL 2 “Tactical Proficiency” Level. Complete any continuing education courses as deemed appropriate, demonstrate experience and/or proficiency in all DL 1 and DL 2 core competencies listed in Appendix 1, Table 1, and served in the CE officer career field for at least 48 months. Having a solid understanding of CE's fundamental concepts will posture the CE officer to execute day-to-day tasks with increased autonomy.

A.1.1.3 DL 3 “Operational Breadth” Level. Complete any continuing education courses as deemed appropriate, demonstrate experience and/or proficiency in all DL 1, DL 2, and DL 3 core competencies listed in Appendix 1, Table 1, and served in the CE officer career field for at least 13 years. Postures CE officers to have a blend of experiences at multiple echelons in order to better convey the officer's potential to serve as Lt Col to the promotion board.

A.1.2 Utilization. The task list is meant to be a pass/fail test. Rather, it is meant to ground the development of all CE officers, whether working at base-level, staff-level, as an academic instructor, as a student, etc to those core capabilities of the CE officer career field. If the officer cannot show competency or has not gained experience per the DL, it does not mean he/she has not performed well in their assigned duties. However, it may limit the officer's future growth potential if those competencies and experiences are not achieved in the targeted timeframe.

A.1.3 Certification. There is no DL certification program or documentation required. However, it is recommended that the DL competencies be reviewed regularly and documented as part of the officer's feedback process.

A.2 Task List. The DL List (Table 1) lays out the required knowledge areas, training courses, and core competencies the CE officer is expected to demonstrate to achieve each Developmental Level. Unit commanders and/or staff directors can establish formal or ad hoc validation programs as necessary to ensure a successful discussion and understanding of the CE competencies covered in Table 1. The timeframes listed are targets, but if a CE officer is

selected to fill an Institutional Requirement (Instructor duty) or other duty which is significantly outside the CE career field, the target can be adjusted accordingly.

Table 1 – Development Level List

Developmental Level 1 (Familiarization) Core Competencies	Description	Target completion: 1-year point
WMGT 101 Air Force CE Basic Course	Successful course completion	
Familiarization with assigned organization	Officer should know the mission of assigned unit & its flights/sub-elements	
Know the missions of Prime BEEF & RED HORSE	Officer should be able to describe missions of Prime BEEF & RED HORSE in basic terms	
Officer / Enlisted Evaluation & Promotion Systems	Officer should be familiar with the main tenets of Officer & Enlisted Evaluation Systems, and know how officers & enlisted promotion systems differ.	
Developmental Level 2 (Tactical Proficiency) Core Competencies	Description	Target completion: 4-year point
Work Classification	Correctly classify work as maintenance, repair, or construction	
Base Planning Restrictions	Familiarization of rules restriction development (airspace, explosive safety arcs, Anti-Terrorism/Force Protection standoffs, natural/cultural resource restrictions).	
Cost Estimating	Ability to develop a cost estimate to the appropriate order of magnitude using cost-estimating methods: parametric cost estimating (e.g., PACES, historical cost/unit of measurement), pricebook estimating (e.g., RS Means), or market research) to estimate a project's cost.	
Explain Work Request Process	Basic understanding of how user requests work and how it gets prioritized. Includes knowing what work constitutes Corrective Maintenance vs work that requires an AF Fm 332, DD1391 Front Page, AF Fm 813	
Trained and experienced in contingency C2 operations	Trained as Unit Control Center, Tactical Operations Center, or Emergency Operations Center member. Display knowledge of key response processes, operating procedures & published plans (e.g., CE Contingency Response Plan, etc). Have experience in a C2 cell real world or exercise scenarios	
Expedient Beddown	Estimate power, water, sewer, trash, facility & airfield pavements required to support a given mission. Knowledge of where to find information on expeditionary assets. Lead notional site layout.	

Developmental Level 3 (Operational Breadth) Core Competencies	Description	Target completion: 13-year point
Experience at multiple echelons	Experience at multiple unit-level duties, and at least one staff-level duty above Wing.	
WMGT 585 Contingency Engineer Command course	Recommend attendance if available	
Silver Flag attendance	Actively participated in Silver Flag training and exercise at least once to gain tactical C2 & beddown planning experience.	
Civilian workforce management	Officer should be familiar with the main tenets of civilian evaluation system & bargaining unit rules.	

Appendix 2
Standardized Duty Titles
32EX, CIVIL ENGINEER OFFICER



32E Duty Titles

B.2 Duty Titles. Upon arriving at a duty station, CE officers and their supervisors request duty title change via the AF Form 2096, *Classification/On-The-Job-Training Action*, or local procedures. The duty title change request is submitted to the AFPC CE Assignment team at AFPC via MilPDS. Thereafter, the requested duty titles are approved or disapproved by the AFPC CE Assignment Team prior to being updated in the officer's official record. The list below is included to assist in determining the proper duty title for a new officer.

B.2.1 Approval. Duty titles from the list below will be automatically approved. Deviations are authorized, but will be reviewed prior to being approved.

B.2.1.1 All duty titles must be in accordance with current CE organizational structure.

B.2.1.2 No "general" duty titles will be considered as place holders. For example, the title "Civil Engineer" will not be approved. Duty titles should be loaded for the officer's projected job.

Standardized Duty Titles

Level and Title

Staff Level

AFPAK HAND, XXXXXXXXXXXXXXXX
CHIEF, XXXXXXXXXXXXXXXX DIVISION
LEGISLATIVE LIAISON
CHIEF, XXXXXXXXXXXX BRANCH
XXXXXX PROGRAM MANAGER
ASST PROF OF XXXXXXXXXXXXXXXX
DEPT HEAD, XXXXXXXXXXXX
EXECUTIVE OFFICER, XXX ABW

Notes

Group (if authorized a CCE) and above only

Commander Level

COMMANDER
COMMANDER, XXXXXXXXXXXXXXXX
DEPUTY COMMANDER, XXXXXXXXXXXXXXXX

May ONLY be used for C Coded Commander
May be used for non-traditional CE Commands

Flight Commanders

BARE BASE FLIGHT COMMANDER
BASE CIVIL ENGINEER
DIRECTOR OF OPERATIONS
DIRECTOR OF ENGINEERING
ELECTRICAL FLIGHT COMMANDER
EMER MGT FLIGHT COMMANDER
ENGINEERING FLIGHT COMMANDER
EOD FLIGHT COMMANDER
EOD RANGE FLIGHT COMMANDER
INSTALLATION MGT FLIGHT COMMANDER
MECHANICAL FLIGHT COMMANDER
MISSION SUPPORT FLIGHT COMMANDER
OPERATIONS FLIGHT COMMANDER
STRUCTURES FLIGHT COMMANDER
AIRFIELDS FLIGHT COMMANDER
PAVEMENT & CONST EQUIPMENT FLT/CC
READINESS & EMERGENCY MGT FLT/CC
DEPUTY, XXXXXXXXXXXX FLIGHT
CHIEF, AIRFIELD PAVEMENT EVAL TM

CGOs serving in "1-deep" BCE posts (non-C-Coded)
RED HORSE only
RED HORSE only
RED HORSE/Non Traditional CE Only

RED HORSE/Non Traditional CE Only

RED HORSE/Non Traditional CE Only
RED HORSE/Non Traditional CE Only
RED HORSE/Non Traditional CE Only

Element Level

CHIEF, ASSET ACCOUNTABILITY
CHIEF, ENVIRONMENTAL
CHIEF, EXPEDITIONARY ENGINEERING
CHIEF, EOD OPERATIONS
CHIEF, EOD SUPPORT
CHIEF, FACILITY SYSTEMS
CHIEF, HEAVY REPAIR
CHIEF, HOUSING MANAGEMENT
CHIEF, INFRASTRUCTURE SYSTEMS
CHIEF, OPERATIONS ENGINEERING

CHIEF, PORTFOLIO OPTIMIZATION
CHIEF, PROJECT MANAGEMENT

Section Level

OIC, ENVIRONMENTAL COMPLIANCE
OIC, DORMITORY MANAGEMENT
OIC, ELECTRIC SHOP
OIC, ENERGY MANAGEMENT
OIC, ENTOMOLOGY
OIC, ENV CONTROL SYSTEMS
OIC, EXECUTION SUPPORT
OIC, FAMILY HOUSING MANAGEMENT
OIC, FINANCIAL MANAGEMENT
OIC, FIRE ALARMS
OIC, FORCE MANAGEMENT
OIC, FURNISHING MANAGEMENT
OIC, HVAC
OIC, MATERIEL CONTROL
OIC, NEXGEN IT
OIC, PAVEMENTS AND GROUNDS
OIC, PLANNING
OIC, PRIME BEEF
OIC, PROGRAM DEVELOPMENT
OIC, PROJECT EXECUTION
OIC, REAL PROPERTY
OIC, REQUIREMENTS AND OPTIMIZATION
OIC, SERVICE CONTRACTS
OIC, STRUCTURES
OIC, WATER AND FUELS MAINT

Job Level

BASE DEVELOPMENT ENGINEER
BASE DEVELOPMENT PRGM MGR
COMMUNITY PLANNER
AMP MANAGER, XXXXXXXXXX
XXXXXXXXXX PROGRAM MANAGER
PROJECT ENGINEER
PROJECT MANAGER
PROJECT PROGRAMMER
PROGRAMMING OFFICER
INFRASTRUCTURE OPTIMIZATION ENGR

Notes:

XXXXXXXXXXXXXXX may be replaced with specific information

In general, Flight level will be "Commanders," Element Level will be "Chiefs," and Section level will be "OICs."
These duty titles are starting points, deviations will be considered by AFPC and may be added to the list